



Contribution ID: 33

Type: **Talk**

SpecTrap

Wednesday, 20 July 2022 11:10 (15 minutes)

SpecTrap is part of the experiments located at HITRAP and aims at precision measurements of optical transitions in few-electron highly charged ions as a means of testing QED predictions in the regime of extreme electromagnetic fields. Particularly, focus is on spectroscopy of hyperfine transitions in hydrogen- and lithium-like ions that are cooled and confined in the cryogenic Penning trap. I will briefly discuss the motivation of the experiment, previous results on ion cooling, its current status, and immediate next steps.

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Session Classification: Session 9